

In the Claims

1.-23. (Cancelled)

24. (New) A high strength stainless steel seamless pipe for use in oil wells, which has superior corrosion resistance, comprising on a mass percent basis:

0.005% to 0.05% of C;

0.05% to 0.5% of Si;

0.2% to 1.8% of Mn;

0.03% or less of P;

0.005% or less of S;

15.5% to 18% of Cr;

1.5% to 5% of Ni;

1% to 3.5% of Mo;

0.02% to 0.2% of V;

0.01% to 0.15% of N;

0.006% or less of O; and

the balance being Fe and unavoidable impurities,

wherein the following equations (1) and (2) are satisfied

$$\text{Cr} + 0.65\text{Ni} + 0.6\text{Mo} + 0.55\text{Cu} - 20\text{C} \geq 19.5 \quad (1)$$

$$\text{Cr} + \text{Mo} + 0.3\text{Si} - 43.5\text{C} - 0.4\text{Mn} - \text{Ni} - 0.3\text{Cu} - 9\text{N} \geq 11.5 \quad (2)$$

where Cr, Ni, Mo, Cu, C, Si, Mn, and N represent the respective contents on a mass percent basis.

25. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 24, further comprising 0.002% to 0.05% of Al on a mass percent basis.

26. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 24, wherein the content of C is in the range of 0.03% to 0.05% on a mass percent basis.

27. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 24, wherein the content of Cr is in the range of 16.6% to less than 18% on a mass percent basis.

28. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 24, wherein the content of Mo is in the range of 2% to 3.5% on a mass percent basis.

29. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 24, further comprising 0.5% to 3.5% of Cu on a mass percent basis.

30. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 29, wherein the content of Cu is in the range of 0.5% to 1.14% on a mass percent basis.

31. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 24, further comprising at least one selected from 0.03% to 0.2% of Nb, 0.03% to 0.3% of Ti, 0.03% to 0.2% of Zr, 0.2% to 3% of W, and 0.0005% to 0.01% of B on a mass percent basis.

32. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 24, further comprising 0.0005% to 0.01% of Ca on a mass percent basis.

33. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 24, wherein the stainless steel seamless pipe has a texture containing a martensite phase as a primary phase and a ferrite phase at a volume fraction of 10% to 60%.

34. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 33, wherein the ferrite phase has a volume fraction of 15% to 50%.

35. (New) The high strength stainless steel seamless pipe for use in oil wells, according to Claim 33, wherein the texture further contains an austenite phase at a volume fraction of 30% or less.